

FINAL COST ESTIMATES - ORANGE BRT PROJECT

| S. No. | Description | Original PC-1 Amount (Rs.) | Revised PC-1 Amount (Rs.) | Comments |
|--------|-------------------------------------------------------------|----------------------------|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A | Infrastructure | | | |
| 1 | Total Construction Cost | 1,413,247,614 | 1,413,247,614 | The construction works are on-going. Remaining construction works can be finished within this amount. |
| 2 | Design Cost [1% of Total Construction Cost (1)] | 14,132,476 | 18,387,032 | No additional expenditure is expected under this head. |
| 3 | Geotechnical Investigation | 6,000,000 | 3,000,000 | No additional expenditure is expected under this head. The savings under this head may be re-appropriated as per the approval of the P&D department. |
| 4 | Environmental Impact Assessment | 5,000,000 | 1,000,000 | No additional expenditure is expected under this head. The savings under this head may be re-appropriated as per the approval of the P&D department. |
| 5 | Detailed Supervision [2% of Total Construction Cost(2)] | 28,264,952 | 200,121,728 | The Revised amount includes Consultant's monthly fees till June 2021 and also till end of DLP i.e June 2022. |
| 6 | Design Vetting Consultant [1% of Const Cost(1)] | 14,132,476 | - | This head is no more needed since the construction has not been undertaken in EPC. |
| 7 | Establishment Charges [4.8% of Total Construction Cost (1)] | 28,264,952 | 58,515,545 | The Revised amount includes monthly PMU expenditures till end of DLP i.e June 2022. This includes include operational expenditures like office rent, purchase of vehicles, equipment, furniture, utility, travel allowance, staff salaries. To be considered as REVENUE component. |
| 8 | Third Party Monitoring [1% of Total Construction Cost(1)] | 14,132,476 | - | This head is being deleted as per decision of Technical Committee Meeting, P&D. |
| 9 | Utility Relocation | 200,000,000 | 266,900,643 | No additional expenditure is expected under this head. PKR 260,358,291/= has been spent under this head already. |
| 10 | Platform Screen Doors (32 No.) | - | 92,571,869 | This is an additional item that must be installed at all four stations to ensure operational integration with Green BRT project. |
| 11 | Generator (400 kVA, 415 volt) | - | 17,224,862 | Reference to the SIDCL visit to BRT depot of OL and SIDCL letter NO. SIDCL/CFO/2021/8529 dated 9th February 2021 regarding the mandatory condition to install wastewater treatment plant as per directives from SEPA. Please see this letter, an email from NESPAK dated 19th February 2021 and details of this cost/rates attached in Cost Estimates section. The cost of sheds over the washing / maintenance areas can be borne from the Total Construction Cost (1) and no separate cost needs to be added for this. |
| 12 | Wastewater Treatment Plant facility | - | 10,000,000 | |
| | Sub Total | 1,723,174,946 | 2,080,969,293 | |
| 13 | Contingency (3%) | 51,695,248 | | This head is being deleted as per decision of Technical Committee Meeting, P&D. |
| | Total | 1,774,870,194 | 2,080,969,293 | |
| 14 | Escalation Amount (Rs.) | 89,367,000 | 89,367,000 | The claims have been processed considering the current Extension of Time (EOT) approved by the Consultant. Further claims (if any) may be covered under the head of Total Construction Cost (Head#1). |

EXECUTIVE ENGINEER
Sindh Mass Transit Authority (SMTA)
Transport & Mass Transit Department,
Government of Sindh

D:\Orange Line PC1\7 Dec 2021

March21\Cost Estimates\for Final PC1\Cost Summary Sheet_New_Final_working_FINAL 3-Admin Bldg Civil Abstraac1 / 4

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| 15 | Total Cost of Infrastructure, Design, Supervision and Relocation | 1,864,237,194 | 2,170,336,293 | Additional amount of PKR 295,194,577 includes regularization of the expenditures paid in addition to the approved amount under respective heads as well as the cost of PSD (head # 10). Part of this amount may be reappropriated within the heads of approved PC-1 as per the approval of the P&D Department. |
| B | Buses & ITS Equipment (Capex Cost) provided by the SIDCL | | | |
| S.No | Description | Amount in FEC (USD) | 36% Taxes for Buses & 30% for ITS in PKR | Comments |
| 1 | 12 m Diesel Hybrid Buses (20 Nos.) | \$3,110,600 | 179,170,560 | Cost of 1 bus = USD 155,530/ as per the financial bid opened by SIDCL (Letter SIDCL(GLBRTS)/COO/2020/8010 dated 3rd November 2020) |
| 2 | Full spare parts package for BRTS vehicles from the delivery of the vehicle through the duration of the contract (B1a) | \$365,300 | | Reference to a letter from SIDCL after the Technical Committee was held vide SIDCL (GLBRTS)/COO/2020/8395 dated 11th January 2021 wherein SIDCL clarified that these are ancillary heads to be considered part and parcel of bus procurement and whose costing was missed in the cost summary sheet earlier. These are the items associated with the procurement of buses. And to be paid in US dollar. Please note that the cost of the buses i.e. USD 3,110,600 is counted only once in the total sum. Although the same is mentioned twice in this summary. |
| 3 | Supply of tools and diagnostic equipment for BRTS vehicles (B1b) | \$12,200 | | |
| 4 | IITS (Hardware + Software + Taxes @ 30%) | \$2,377,977 | 60,636,306 | Procurement for IITS hardware and software including taxes to be undertaken under this head. |
| | Total | \$5,866,077 | 239,806,866 | TOTAL USD 5,866,077/- is to be paid as Foreign Exchange Component in USD |
| | Total (\$) in PKR | 1,178,379,186 | | |
| | (OPEX COST) | PKR | Amount in PKR (3 years) | |
| 5a | Bus Ops O&M | 187,234,740 | 561,704,220 | BRT operations are covered under this head. Fare revenue is calculated at an average Fare of PKR 22 per passenger. Non - Fare revenue is taken at 3% of the Fare Revenue because of fewer stations on the Orange BRT corridor. Ridership of Orange BRT: 24,225 passengers / day (analyzed by Consultants) |
| 5b | Total Revenue (Fare + Non-Fare) | 172,915,628 | 518,746,884 | |
| 5c | Operations Deficit (5a-5b) | 14,319,112 | 42,957,336 | |
| 6 | ITS Operations | 11,230,000 | 33,700,000 | ITS operations are covered under this head. Details provided in the cost estimates. |
| 7 | ITS Maintenance (2 yrs warranty + 1 year S&M) | | 44,000,000 | Maintenance of ITS equipment is covered under this head. |
| 8 | Station Management | 43,200,000 | 129,600,000 | Expenditures related to security, cleaning and minor maintenance |
| 9 | Operation Unit | 20,000,000 | 60,000,000 | Exclusive unit under SIDCL to look after BRT operations and maintenance |
| | | USD | PKR | |

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| 10 | Maintenance supervision of vehicles | \$254,600 | 40,736,000 | Reference to a letter from SIDCL after the Technical Committee was held vide SIDCL/GBRTS/COO/2020/8395 dated 11th January 2021 wherein SIDCL clarified that these are ancillary heads to be considered part and parcel of bus procurement and whose costing was missed in the cost summary sheet earlier. These are the items associated with the procurement of buses. Please note that the cost of the buses i.e. USD 3,110,600 is counted only once in the total sum. Although the same is mentioned twice in this summary. |
| 11 | Maintenance training program | \$2,800 | 448,000 | |
| 12 | Driver training program | \$2,300 | 368,000 | |
| 13 | Completion of full vehicle homologation, registration and licensing for BRTS vehicles | \$103,200 | 16,512,000 | |
| | Total Subsidy Req. (B) (3c+4+5+6+7+8+9+10+11) | | 368,321,336 | PKR 368,321,336/- is to be paid as Pak Rupee Component |
| | Total (A+B) | 1,546,700,522 | | |
| 14 | Add 2% Consultancy Charges (Design, Transaction, Legal and Operations Advisory) | 30,934,010 | | Consultancy services required for designing integration and operationalization of the ASE BRT. Details provided in the cost estimates. |
| 15 | Add 2% Contingencies (Unforeseen/Hedging/Price Variation / Ancillary) | 30,934,010 | | Unexpected price changes due to foreign exchange component and inflation. |
| 16 | Add 2% Insurance of Government Asset (0.67% per year) | 30,934,010 | | Insurance cost necessary to secure the government assets considering any unfavorable circumstances. |
| 17 | Add 2% Establishment Charges of SIDCL | 30,934,010 | | Administrative expenditures of the SIDCL establishment are covered under this head. |
| | Improvement in Infrastructure (Physical Integration & Infrastructure Maintenance) | 450,000,000 | | Cost of physical integration of ASE and Green BRT and annual maintenance of the ASE BRT dedicated corridor for 3 years rationalized after Technical Committee Meeting. |
| | TOTAL (to be given to SIDCL) | 2,120,436,564 | | To be considered as CAPITAL component. |
| | TOTAL Revised PC-1 Cost | 4,290,772,857 | | REVENUE |

| | | |
|---------------------------------------------|----------------------|-----------------------------------------------------------------------------------|
| Total Foreign Exchange Component (USD) | \$5,866,077 | Total USD 5,866,077/- is to be paid as Foreign Exchange Component in USD to SIDCL |
| Total Local Component in PKR in Revised PC1 | | |
| Infrastructure | 2,170,336,293 | Undertaken by SMTA, TMTD. |
| Bus Ops & ITS | 1,181,864,244 | To be given to the SIDCL |
| Total Local Component in PKR | 3,352,200,537 | |

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| | TOTAL (in PKR) | | 4,290,772,857 | 1 USD = PKR 160 |

| | | | |
|--------------------------|--------------------------------|----------------------|---------------------------------------------------------------------------------------------------|
| INFRASTRUCTURE | | | |
| | Revenue Component | 168,312,276 | Refer to establishment costs of SMTA in Infrastructure Component (7), PSD (10) and Generator (11) |
| | Capital Component | 2,002,024,017 | Total Infrastructure Cost minus Establishment Cost (15)-(7)-(10)-(11) |
| BUS OPS & ITS | | | |
| | Revenue Component | 2,120,436,564 | The total amount to be paid to SIDCL is being taken as <i>Revenue</i> |
| | Total Revenue Component | 2,288,748,840 | |
| | Total Capital Component | 2,002,024,017 | |